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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/023,672	02/13/1998	EDWARD M. SCHEIDT	STS-119	7278

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IP STRATEGIES  
12-1/2 Wall Street  
Suite 1  
Asheville, NC 28801

EXAMINER

DARROW, JUSTIN T

ART UNIT	PAPER NUMBER
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2132

DATE MAILED: 10/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/023,672

Applicant(s)

SCHEIDT ET AL.

Examiner

Justin T. Darrow

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07/01/2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-71 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-65 is/are allowed.
- 6) ☒ Claim(s) 66-71 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 July 2004 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. Claims 1-71 have been presented for examination. Claims 66-69 have been amended and new claims 70 and 71 have been added in an amendment filed 07/01/2004. Claims 1-71 have been examined

#### ***Priority***

2. Acknowledgment is made that the instant application claims the benefit of provisional Application No. 60/039,696, filed 02/13/1997.

#### ***Drawings***

3. The drawings were received on 07/01/2004. These drawings are approved.

#### ***Response to Arguments***

4. Applicant's arguments, see Remarks, page 13 of amendment, filed 07/01/2004, with respect to the rejection of claims 66-69 under 35 U.S.C. § 101 have been fully considered and are persuasive. See MPEP § 2106 IV. B. 2(a) and *In re Lowry*, 32 USPQ2d 1031, 1034 (Fed. Cir. 1994). Therefore, the rejection has been withdrawn. However, upon further consideration necessitated by amendment, a new ground of rejection is made in view of the "printed matter rejection" under 35 U.S.C. § 102.

***Terminal Disclaimer***

5. The terminal disclaimer filed on 04/19/2004 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of any patent granted on Application No. 09/874,364 has been reviewed and is accepted. The terminal disclaimer has been recorded.

6. The terminal disclaimer filed on 04/19/2004 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of U.S. Patent No. 6,542,608 B2 has been reviewed and is accepted. The terminal disclaimer has been recorded.

7. The terminal disclaimer filed on 04/19/2004 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of U.S. Patent No. 6,608,901 B2 has been reviewed and is accepted. The terminal disclaimer has been recorded.

8. The terminal disclaimer filed on 04/19/2004 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of U.S. Patent No. 6,549,623 B1 has been reviewed and is accepted. The terminal disclaimer has been recorded.

***Claim Rejections - 35 USC § 102***

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

10. The printed matter rejection applies unless “the invention as defined by the claims requires that the information be processed not by the mind, but by a machine, the computer.” *Lowry*, 32 USPQ2d at 1034 citing *In re Bernhart*, 163 USPQ 611, 615 (C.C.P.A. 1969). In claims 66-71, the cryptographic key is not recited to be used in processing any data. Because claims 66-71 recite merely information content of a memory, rather than functional characteristics of the memory, the information content is analogous to printed matter. See *Lowry*, 32 USPQ2d at 1034-35 and *Lowry*, U.S. Patent No. 5,664,177 A, claims 1-5. “Although the [analogous] printed matter must be considered, it may not be entitled to patentable weight.” *In re Gulack*, 217 USPQ 401, 404 (Fed. Cir. 1983). In claims 66-71, the cryptographic key is given no patentable weight beyond the form of data explicitly recited in claims 66-71.

11. Claims 66-71 are product-by-process claims such that the patentability of the product, i.e. the storage medium, does not depend on its claimed method of production of the cryptographic

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key that it contains. See MPEP § 2113 and *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

12. Claims 66-68, 70, and 71 are rejected under 35 U.S.C. 102(b) as being anticipated by Takayanagi, U.S. Patent No. 5,168,371 A.

As per claim 66, Takayanagi illustrates:

a storage medium including a cryptographic key (see column 9, lines 42-54; figure 1, item 13; figure 3; a cipher number corresponding to each of the enciphered identification key codes stored in a job parameters area).

As per claim 67, Takayanagi further show:

that the cryptographic key includes a stream of symbols (see column 9, lines 42-54; figure 1, item 13; figure 3; a cipher number corresponding to each of the enciphered identification key codes, represented as a row of encircled numerals).

As per claim 68, Takayanagi additionally depict:

that the cryptographic key includes at least one symbol block (see column 9, lines 42-54; figure 1, item 13; figure 3; a cipher number corresponding to each of the enciphered identification key codes, represented as a row of encircled numerals).

As per claim 70, Takayanagi then points out:

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that the storage medium comprises a magnetic storage medium (see column 9, lines 42-54; figure 1, item 13; figure 3; a cipher number corresponding to each of the enciphered identification key codes stored in RAM in the job parameters area).

As per claim 71, Takayanagi then points out:

that the storage medium comprises random access memory (see column 9, lines 42-54; figure 1, item 13; figure 3; a cipher number corresponding to each of the enciphered identification key codes stored in RAM in the job parameters area).

13. Claims 66 and 69 are rejected under 35 U.S.C. 102(e) as being anticipated by Park, U.S. Patent No. 5,796,826 A.

As per claim 66, Park shows:

a storage medium including a cryptographic key (see column 4, lines 52-57; figure 7, items 1, G, and R; encryption keys R and G are stored in key storage).

As per claim 69, Park then illustrates:

that the cryptographic key includes a key matrix (see column 3, lines 5-41; encryption key G a  $(k \times n)$  matrix and encryption key R an  $(n \times n)$  matrix.

***Allowable Subject Matter***

14. Claims 1-65 are allowed.

***Conclusion***

15. Applicant's amendment necessitated the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

***Telephone Inquiry Contacts***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin T. Darrow whose telephone number is (703) 305-3872 until mid October 2004, then (571) 272-3801 thereafter, and whose electronic mail address is justin.darrow@uspto.gov. The examiner can normally be reached Monday-Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barrón, Jr., can be reached at (703) 305-1830 until mid October 2004, then (571) 272-3799.




The fax number for Formal or Official faxes to Technology Center 2100 is (703) 872-9306. In order for a formal paper transmitted by fax to be entered into the application file, the paper and/or fax cover sheet must be signed by a representative for the applicant. Faxed formal papers for application file entry, such as amendments adding claims, extensions of time, and statutory disclaimers for which fees must be charged before entry, must be transmitted with an authorization to charge a deposit account to cover such fees. It is also recommended that the cover sheet for the fax of a formal paper have printed **"OFFICIAL FAX"**. Formal papers transmitted by fax usually require three business days for entry into the application file and consideration by the examiner. Formal or Official faxes including amendments after final rejection (37 CFR 1.116) should be submitted to (703) 872-9306 for expedited entry into the application file. It is further recommended that the cover sheet for the fax containing an amendment after final rejection have printed not only **"OFFICIAL FAX"** but also **"AMENDMENT AFTER FINAL"**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900 until mid October 2004, then (571) 272-2100 thereafter.

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October 17, 2003

  
**JUSTIN T. DARROW**  
**PRIMARY EXAMINER**  
**TECHNOLOGY CENTER 2100**